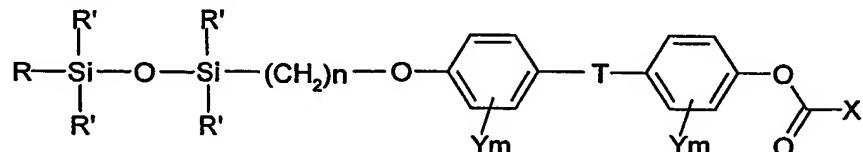
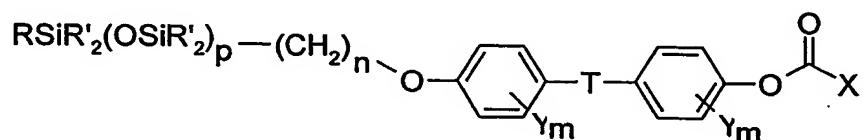


CLAIMS

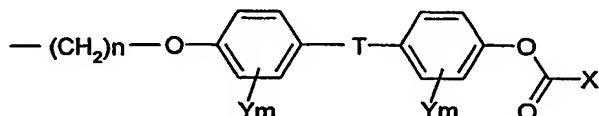
1. A bistable liquid crystal cell comprising a ferroelectric compound having a smectic C phase, arranged between alignment layers of polyamide or polyester
5 wherein said compound has the general formula



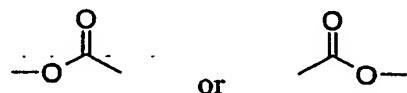
or



10 wherein R represents an alkyl group having from 1 to 10 carbon atoms or the group



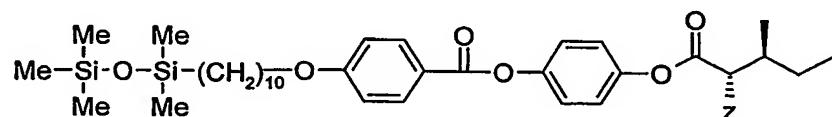
each R' represents an alkyl group having from 1 to 4 carbon atoms. T is



15

X represents an alkyl or halogen-substituted alkyl group having at least one chiral centre, Y represents a fluorine atom, m has a value of 0, 1 or 2, p has a value of 2, 3 or 4 and n has a value of 10, 11 or 12.

20 2. A cell as claimed in claim 1 wherein the compound is



wherein Z is F or Cl.

3 A cell as claimed in any one of claims 1 to 2 wherein the alignment layer is nylon-6,6 or nylon-6.

5 4. A cell as claimed in any one of claims 1 to 3 wherein the alignment layer is an aliphatic/aromatic polyester.

5. A cell as claimed in claim 4 wherein the alignment layer is PET (polyethyleneterephthalate) or PBT (polybutyleneterephthalate).

10 6. A cell as claimed in any one of claims 1 to 5 wherein the siloxane-comprising material is disposed between two substrates, at least one of said substrates supporting a transparent conducting film.

15 7. A cell as claimed in any proceeding claim comprising a mesogen selected to provide a tilt angle of around 22.5 degrees

8. A cell as claimed in any one of claims 1 to 6 comprising a mesogen selected to provide a tilt angle of around 45 degrees.

20 9. A ferroelectric liquid crystal device comprising at least one cell as claimed in any one of claims 1 to 8.

25 10. A device as claimed in claim 9, wherein said device is one of a multiplexed FLC large panel display or a liquid crystal on silicon (LCOS) device.

11. A process for bistable switching of a ferroelectric liquid crystal device, in which a cell as claimed in any one of claims 1 to 8, is switched by applying an electric field having a value in the range 2 to 50V per μm cell thickness.